KOROLEV, N. V.

USSR/Physics - Luminiscence, 21 Sep 53
Infrared Band

"Photoluminiscence of PbS in the Infrared Spectrum Band," L.N. Galkin and N.V. Korolev DAN SSSR, Vol 92, No 3, pp 529-530

Investigated the photoluminiscence of PbS, the sensitivity of which reaches 3.5 microns. Found the luminiscence of the sample particularly intensive at 2.6 microns by using an interference filter transparent at this frequency. Presented by Acad A.A. Lebedev, 20 Jul 53.

268T91

KOROLEV, N.V.

KOROLEV, N.V.; AGROSKIN, L.S.

Apparatus for cytospectrophotometry. Biofizika 2 no.4:513-517 '57.
(SPECTROPHOTOMETER) (MIRA 10:9)

SOKOLOVSKIY, V.V.; KOROLEV, N.V.

Determination of the degree of inactivation of cholinesterase by the histospectrophotometric method. TSitologiia 1 no.2: 177-182 Mr-Ap '59. (MIRA 12:9)

1. Voyenno-meditsinskaya akademiya i Gosudarstvennyy opticheskiy institut, Leningrad.
(CHOLINESTERASE) (SPECTROPHOTOMETRY)

YEVERINOVA, T.N.; KORDLEV, N.V.; AGROSKIN, L.S.

Coacervates containing purine and pyrimidine compounds [with summary in English]. Biofizika 4 no.1:27-51 Ja '59. (MIRA 12:1)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta M.V. Lomonosova.

(PURINES,
coacervates containing purine & pyrimidine cpds.
(Rus))
(PYRIMIDINES,
same)

24(4), 24(7) SOV/51-6-6-33/34

AUTHORS: Agroskin, L.S. and Korolev, N.V.

TITLE: Microscope-Spectrophotometers (Mikroskopy-spektrofotometry)

PERIODICAL: Optika i spektroskopiya, 1959, Vol 6, Nr 6, pp 832-833 (USSR)

ABSTRACT: The authors describe two variants of a microscope spectrophotometer. The first variant is called the light-probe method (Fig a). In this variant the exit slit of a monochromator is replaced by a small aperture 1. This aperture is projected onto the object plane 4 by means of a semi-aluminized prism 2 and a micro-objective 3. Light collected by the objective at the required point on the object (the light-probe) passes then through a condenser 5 to a receiver 6. The microscope part is used to observe and position the object; for this purpose additional illumination via prism 7 is employed. The light-probe principle was used to construct an instrument for measurement of optical densities of small objects (dimensions up to 1 μ^2) at visible and ultraviolet wavelengths of the mercury spectrum. If a hydrogen lamp is used the light-probe area is greater than 100 μ^2. In the second variant (Fig 6) a monochromatic micro-image is projected onto an opaque screen 2 which is a concave mirror with an aperture in the centre. Light which has passed through this aperture and through the appropriate point of the

Card 1/2

object 1 reaches a photomultiplier 3. For visual observation an optical system 4 focused on the mirror surface was used. This arrangement makes it possible to observe the object continuously during the process of measurement. The first and second variants may be used simultaneously in a unified manner as it was done in a prototype of an industrial ultraviolet microscope-spectrophotometer MUF-4. The following types of work can be carried out with the microscope-spectrophotometers described above;(1) recording of the absorption spectra in the visible and ultraviolet regions of biological objects, dye films, solutions in microcells, organic and inorganic microcrystals,etc; (2) recording of the fluorescence spectra of organic microcrystals and live water plants; (3) recording of the ultraviolet absorption spectra of spots on paper chromatograms; (4) recording of the reflection spectra of individual phases in metals and minerals. There is 1 figure.

28(5) SOV/32-25-8-41/44

AUTHOR: Korolev, N. V.

TITLE: Device for Emission-micro-spectrum Analysis

PERIODICAL: Zavodskaya laboratoriya, 1959, Vol 25, Nr 8, pp 1014-1016 (USSR)

ABSTRACT: For making localized and micro-spectrum analyses a special device was designed for the spectrograph. The device consists of an optical section and of a spark generator. The optical part (Fig 1) is in principle an arrangement of lenses and prisms with an aluminized foil through which the rays arrive to the spectrograph, and the observation of a microscopic spark between one (or two) thin wire-electrodes (Fig 2) on the surface to be investigated (cut) is made possible. The observation of the spark is also possible directly by means of a microscope. The wiring of the generator is given (Fig 3). A transformer from the arc generator PS-39 is being used. The micro-electrodes are made of a copper wire (diameter 0.04 mm). The analysis results (Table) on dentritic axes and interaxial segregates of steel castings prove that out of the alloying elements of this steel (Cr, Ni, Mn, Mo) Mo and Cr have the strongest liquefying

Card 1/2

Device for Emission-micro-spectrum Analysis SOV/32-25-8-41/44

effect. By means of the described device it is possible to investigate thin coatings and non-conductors (with 2 electrodes). For example analyses have been made of the composition of thin surface layers on fractures of 35KhN3 steel to investigate the tempering brittleness of second degree. The total quantity of various elements which can be determined in the analysis is as a rule 10^{-8} - 10^{-9} g. The sensitivity can be increased to 10^{-12} - 10^{-13} g under certain conditions. There are 3 figures and 1 table.

Card 2/2

KOROLEV, N. V., AGROSKIN, L. S., DAVYDOVA, M. I., ZARUBINA, I. L.

"Microscope-Cytophotometers for Cytochemical Analysis. (Report Not Presented.)"

report submitted for the First Conference on the problems of Cyto and Histochemistry, Moscow, 19-21 Dec 1960.

Leningrad

AGROSKIN, L.S.; KOROLEV, N.V.

Photometric attachments to microscopes. Prib.i tekh.eksp. no.1:140-141 Ja-F '60. (MIRA 13:6)
(Microscope)

AGROSKIN, L.S.; BRODSKIY, V.Ya.; GRUZDEV, A.D.; KOROLEV, N.V.

Some problems in the quantitative spectrophotometric analysis of the cell. TSitologiia 2 no.3:337-352 My-Je '60. (MIRA 13:7)

1. Institut morfologii zhivotnykh AN SSSR, Moskva i Institut tsitologii i genetiki Sibirskogo otdeleniya AN SSSR, Novosibirsk.

(SPECTROPHOTOMETRY) (CELLS)

KHAN-MAGOMETOVA, Sh.D.; GUTKINA, A.V.; MEYSEL', M.N.; AGROSKIN, L.S.;
KOROLEV, N.V.

Ultraviolet flucrescence of some animal organs and its change after irradiation. Biofizika 5 no. 4:446-449 '60. (MIRA 13:12)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(ULTRAVIOLET RAYS—PHYSIOLOGICAL EFFECT)
(X RAYS—PHYSIOLOGICAL EFFECT) (FLUORESCENCE)

FEDIN, Leonid Andreyevich; PAPIYANTS, K.A., kand. fiziko-matem. nauk, retsenzent; KOROLEV, N.V., inzh., retsenzent; IOFFE, G.A., red.; TOKAR', V.M., red. izd-va; ORESHKINA, V.I., tekhn. red.

[Manual on microscopes, their accessories, and lenses] Mikroskopy, prinadlezhnosti k nim i lupy; spravochnaia kniga. Pod red. G.A.Ioffe. Moskva, Gos. nauchno-tekhn. izd-vo Oborongiz, 1961. 251 p. (MIRA 14:10)

(Microscope)

AGROSKIN, L.S.; KOROLEV, N.V.

Microscope-spectrofluorimeter for the ultraviolet region. Biofizika 6 no.4:478-485 '61. (MIRA 14:7)

(FLUORESCENCE MICROSCOPY)

AGROSKIN, L.S.; KOROLEV, N.V.; KULAYEV, I.S.; POMOSHCHNIKOVA, N.A.

Fluorescence of nucleic acids in solution. Dokl.AN SSSR 136 no.1: 226-229 Ja '61. (MIRA 14:5)

1. Predstavleno akademikom N.M.Sisakyanom.
(Nucleic acids) (Fluorescence)

KOROLEV, N. V. and LEVIN, S. V.

"The Use of Micro-Objectives as Dark-Field Condensers." pp. 39

State Optical Institute imeni S. I. Vavilov, Laboratory of Cell Physiology of the Institute of Cytology of the Academny of Sciences USSR

II Nauchnaya Konferentsuya Instituta Tsitologii AN SSSR. Tezisy Dokladov (Second Scientific Conference of the Institute of Cytology of the Academy of Sciences USSR, Abstracts of Reports), Leningrad, 1962 88 pp.

JPRS 20,634

KOROLEV, N.V.; LEVIN, S.V.

Microscopic study of living biological objects by means of dark-field illumination. TSitologiia 5 no.5:588-591 S-O '63. (MIRA 17:4)

1. Gosudarstvennyy opticheskiy institut i Laboratoriya fiziologii kletki Instituta tsitologii AN SSSR, Leningrad.

AGROSKIN, L.S.; KOROLEV, N.V.

Monochromators for microspectrophotometers. Prib. i tekh. eksp. 8 no.4:135-138 Jl-Ag '63. (MIRA 16:12)

1. Gosudarstvennyy opticheskiy institut.

KOROLEV, N.V.; FAYVILEVICH, G.A.; GROMOVA, G.P.; LEBEDEVA, S.B.

Investigating nonmetallic inclusions by the microspectral method. Sbor. trud. TSNIICHM no.32:138-141 '63. (MIRA 16:12)

KOROLEV, N.V.; RYL'NIKOVA, A.G.

Developing methods to determine the mineralogical composition of nonmetallic inclusions in reflected polarized light. Sbor. trud. TSNIICHM no.38:76-85 '64. (MIRA 18:3)

L 14315-65 EPF(n)-2/EWT(m)/EWP(b)/EWA(d)/EWP(t) Pu-4 BSD/ASD(m)-3
JD/JG/WB/MLK

ACCESSION NR: AT4048059 S/0000/64/000/000/0117/0123

AUTHOR: Korolev, N.V., Gorbunov, S.A., Bogdanov, A.S., Nadutenko, G.P. B

TITLE: Redistribution of impurities in titanium and its alloys during oxidation 18

SOURCE: Soveshchaniye po metallurgii, metallovedeniyu i primeneniyu titana i yego splavov. 5th, Moscow, 1963. Metallovedeniye titana (Metallography of titanium); trudy* soveshchaniya. Moscow, Izd-vo Nauka, 1964, 117-123

TOPIC TAGS: titanium impurity, titanium alloy impurity, impurity redistribution, titanium oxidation, titanium hardness

ABSTRACT: The possible redistribution of impurities between the surface layers and the basic mass of titanium specimens during oxidation in air was studied on technically pure titanium (composition known) and some alloys after heating at 800-1200C; carbon, nitrogen, iron, aluminum, silicon, calcium and magnesium were determined. The distribution of microhardness was studied on polished sections through the gas-saturated layer. Spectral analysis and occasional local analysis were performed. Standard values, obtained from non-oxidized specimens, served as controls. Spectral analysis and measurements of microhardness showed that the gas-saturated layer in specimens

Card 1/3

L 14315-65
ACCESSION NR: AT4048059

oxidized at 1100-1200C is a solid solution which includes not only oxygen, but also carbon (to 1%) and nitrogen (to 3%); besides, some enrichment of the surface layer by iron, silicon and aluminum was observed. At these temperatures, the content of nitrogen in the surface layer was increased significantly by the interaction of titanium with the nitrogen from the air. The thermodynamic calculation of the dependency of the isobaric potential of formation of the oxides of impurities and alloying elements on temperature confirmed the probability of redistribution of these elements during oxidation. Spectral analysis showed enrichment of the gas-saturated layer by alloying elements after oxidation in the following binary alloys: Ti-Mo, Ti-V, Ti-Cr, Ti-Mn, Ti-Sn and Ti-Cu containing up to 10% alloying elements; thus, at certain temperatures, the amount of Mo, V and Cr exceeded the initial content 2-3 fold, and almost pure tin and copper appeared on the surface. The study also led to the discovery of an uneven distribution of impurities not only in different melts but within different specimens of the same melt; thus, the calcium and magnesium content exceeded the average 5-6 fold in some specimens. Unreported admixtures were also found. Orig. art. has: 3 figures, 1 table and 2 formulas.

ASSOCIATION: none

Card 2/3

L 14315-65

ACCESSION NR: AT4048059

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SUBMITTED: 15Jul64

ENCL: 00

SUB CODE: MM

NO REF SOV: 006

OTHER: 001

Card 3/3

L 39976-65 EWA(c)/EWT(m)/EWP(b)/T/EWA(d)/EWP(w)/EWP(t) IJP(c) JD/GS

ACCESSION NR: AT4048088 S/0000/64/000/000/0294/0301 39 B+1

AUTHOR: Korolev, N. V.; Gorbunov, S. A.; Bogdanov, A. S.

TITLE: Application of optical emission microanalysis to the study of titanium alloys 18 27

SOURCE: Soveshchaniye po metallurgii, metallovedeniyu i primeneniyu titana i yego splavov. 5th, Moscow, 1963. Metallovedeniye titana (Metallography of titanium); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1964, 294-301 16

TOPIC TAGS: titanium, titanium alloy, titanium alloy optical analysis, titanium alloy microanalysis, optical emission microanalysis, emission spectrum 27

ABSTRACT: The modernization of emission microanalysis units has made possible analyses in an atmosphere of inert gases and the amplification of the intensity of a locally weakened microspark. Microspark analysis in argon is used, for example, in the analysis of alloys for nitrogen and oxygen. The optical system of the modernized unit is shown in Fig. 1 of the Enclosure. This unit provides for the use of a guide groove in the quartz plate for sparking the sample surface. By the use of a weakened microspark and a guide groove it is possible to localize electrical

Card 1/4

0

charges to an area with a diameter up to 0.05 mm, with a minimum depth of the damaged layer of 10 microns. The wiring diagram of the generator for obtaining either a strong or weak microspark is included in the paper. Microspectral analysis is commonly used for investigating titanium alloys, since it has several advantages in comparison with conventional spectral analysis. One of the advantages is the possibility of analysis without destroying the sample. The described method and appliances may be used for microspectral analysis of gaseous inclusions. They may also be used for analyzing thin layers of the material on copper plates. Microspectral emission analysis of surface layers is irreplaceable for finding the causes of defects arising due to variation of alloy content. Layers up to 0.1 micron in thickness may be analyzed. The guide groove on the device allows one to localize the changes during microspectral analysis and thus determine the distribution of alloying elements in grains of the cast alloy Ti+5% Al+2% V. Microspectral analysis is also used together with etching of the microstructure, for instance, for Ti+5% Al+0.8% Mo, Ti+5% Al+0.8% Fe, and Ti+5% Al+2% V, indicating the presence of beta phase brittleness in these alloys. Metallographic analysis of microsections, both in the usual way and by polarized light, should precede

L 39976-65
ACCESSION NR: AT4048088

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microspectral analysis, since this enables one to determine the alloy structure and estimate the quality of the existing chemical heterogeneity. The best way of doing this is by forming a layer of TiO_2 300-750 A thick. A 260-460 A layer is yellow, 480-530 A is purple, and 600-750 A is blue. Prior to microanalysis, the surfaces cracks, breaks and other defects should be oxidized and observed under a microscope with different magnifications in polarized light. Orig. art. has: 5 figures and 1 table.

ASSOCIATION: None

SUBMITTED: 15Jul64 ENCL: 01 SUB CODE: OP, MM

NO REF SOV: 003 OTHER: 000

Card 3/4

L 39976-65

ACCESSION NR: AT4048088 ENCLOSURE: 01

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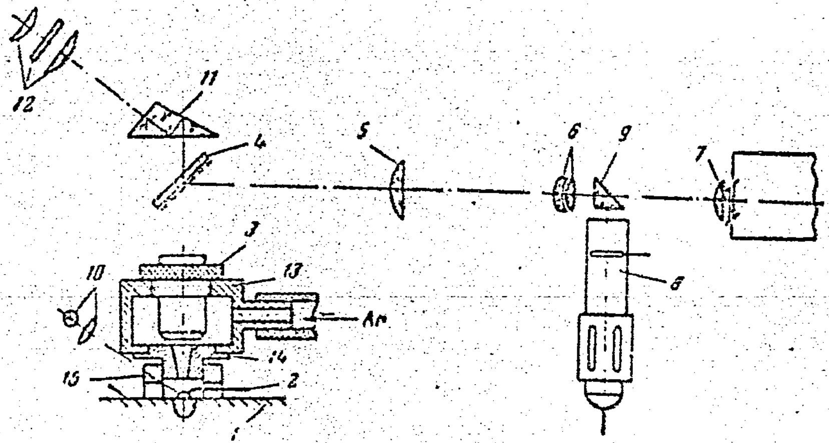


Figure 1. Optical system of a unit for emission analysis: 1 - analyzed sample; 2-microelectrode; 3-microscope objective; 4-semialuminized reflector; 5-quartz lens; 6-achromatic lens block; 7-spectrograph slit; 8- light tube; 9-hinged prism; 10-guide light; 11- deflecting prism; 12-eyepiece; 13-chamber; 14-chamber nozzle; 15-guide cap.

Card 4/4 mb

KOROLEV, N.V.; FAYVILEVICH, G.A.

Microspectral method of studying nonmetallic inclusions.
Zav. lab. 30 no.5:557-558 '64. (MIRA 17:5)

RAZIKOV, M.I.; KOROLEV, N.V.

Automatic deposition with a large diameter electrode. Avtom. svar. 18 no.5:35-37 My '65. (MIRA 18:6)

1. Ural'skiy politekhnicheskiy institut im. S.M. Kirova.

YERMOLENKO, A.P.; KOROLEVA, N.V.; KOROLEV, N.V.; LEONOV, Yu.V.

Quenching of hardened ferritic-austenitic chromium-nickel steel. Metalloved. i term. obr. met. no. 12:51-55 D '65.
(MIRA 18:12)

Korolev, N. V.

S/019/59/000/22/283/439
D003/D002

23(
24(4)

AUTHOR: Korolev, N.V.

TITLE: A Double Microscope With Polarizing Optic System

21

PERIODICAL: Byulleten' izobreteniy, 1959, Nr 22, p 66 (USSR)

ABSTRACT: Class 42k, 48. Nr 124191 (600785/26 of 30 May 1958). A microscope fitted with an additional diaphragm with a cylindrical lens, designed to facilitate the investigation of the optic properties of microscopic grains of minerals and technical materials in specimens in reflected polarized light with large light beam angles (up to 75°).

Card 1/1

23(5) SOV/19-59-9-206/362

AUTHOR: Korolev, N.V.

TITLE: An Ultra-Violet Luminescent Microscope-Spectrophotometer

PERIODICAL: Byulleten' izobreteniy, 1959, Nr 9, p 48 (USSR)

ABSTRACT: Class 42h, 14_{01}. Nr 119697 (600635 of 28 May 1958) To enable microspectrophotometric work to be carried out by the light probe method, a concave mirror, illuminated from its reverse side by a monochromator and having a transparent area whose image appears in the object plane in the form of a small light spot probe, is installed in the plane of the intermediate image of the object.

Card 1/1

KOROLEV, N. V.

C-O-N-F-I-D-E-N-T-I-A-L Sum 1137

The use of fluorescent microscopy in paleobotany was proposed by V. Ya. Aleksandrov and I. N. Sveshnikova of the Botanical Institute of the Academy of Sciences USSR. A report devoted to the further development of ultraviolet microscopy was given by Ye. M. Brumberg of the State Optical Institute in which he describes a method of light transformation worked out in 1940. Brumberg also reported more recent work done in conjunction with N. V. Korolev on an indirect method of observation in which the ultraviolet image is projected on a fluorescent screen. A special spectrographic apparatus for the microspectral analysis of the chemical composition of cells, constructed by Brumberg and S. A. Gershgorin, was also mentioned.

Conference on New Microscopic Methods Held by the Institute of Biological Physics, Academy of Sciences USSR and the State Order of Lenin Optical Institute, held in Moscow, 21-23 Dec 55 (Prioroda, Vol 45, No 6, Jun 56 pp 42-47)
SO: CIA, FDD Summary No. 1137, 28 November 1956, Confidential

KOROLEV N V

An article "Fifth Conference of Luminescence (Crystal Phosphors)," by V. Arkhangelskaya, N. Tolstoy and P. Feofilov, Optika i Spektroskopiya Vol. 1, No. 6, Oct. 56, pp 813-820. The Fifth All-Union Conference was called by the Acad. of Sciences, EstonianSSR, Tartu, 25-30 June 55, the Physical Institute im P.N. Lebedev of the Acad. of Scis, and the State Optical Inst. im S. I. Vavilov. The following participated:
SO: CIA, FDD Sum 1204, 28 Jan. 55 Confidential

A number of reports was concerned with the properties and methods of preparation of various luminophores that are of interest either from the [illegible] point of view or from that of practical applications. [illegible] discussed in his paper the characteristics of the infrared luminescence of lead sulfide, a phenomenon which he discovered together with N. V. Korolev. B. M. Nosenko, L. S. Revzin, and D. Ya. Yaskolko discussed the characteristics of phosphors based on $CaSO_4$, particularly of the phosphor $CaSO_4$ -Mn, the capacity of which to accumulate light energy after being exposed to excitation by hard or corpuscular radiation makes it suitable for use as a sensitive dosimeter. Yu. N. Zhvanko, Z. L. Morgenshtern, and L. M. Shamovskiy investigated the characteristics of phosphors based on potassium iodide which had been activated with two analogs of thallium, i.e., indium and gallium. Investigation of the luminescence characteristics of sodium fluoride fusions containing uranium enabled Z. Sverdlov to develop a simple method for the quantitative determination of uranium in minerals, ores, and water.

ACCESSION NR: AP4031687 S/0286/64/000/005/0055/0055

AUTHOR: Korolev, M. V.

TITLE: Optical emission microanalyzer

SOURCE: Byulleten' izobreteniy i tovarny*kh znakov, no. 5, 1964, 55

TOPIC TAGS: spectrograph, spectroscope, microanalyzer, optical emission microanalyzer

ABSTRACT: An optical emission microanalyzer, containing a microscope for examinations in reflected light, a spectrograph and equipment for photoelectric recording, and distinguished by the fact that, for the purpose of increased localization and absolute sensitivity of the emission microanalyzer, the optical system of the microscope projects a spark image onto a reflector slot of the spectrograph. A microanalyzer, as per paragraph above, distinguished by the fact that, in order to check the alignment of the spectral lines with the input slots of the spectrograph, the spark ignition system in the device is connected to the line scanning unit of a television tube. Orig. art. has: 1 figure.

ASSOCIATION: none State optical inst

Card 1/1

ACCESSION NR: AP4027216

S/0286/64/000/006/0068/0068

AUTHOR: Kazantsev, Ye. A.; Vishnitskiy, A. L.; Gusev, N. N.; Kuznetsova, V. G.; Korolev, N. V.

TITLE: Method for the electrochemical grinding and polishing of articles in a drum (Class C 23b; 48a, 105 No. 161197 from 6 February 1963)

SOURCE: Byul. izobret. i tovarn. znakov, no. 6, 1964, 68

TOPIC TAGS: grinding, polishing, electrochemical grinding, electrochemical polishing, abrasive

ABSTRACT: 1. Method for the electrochemical grinding and polishing of articles in a drum has the special feature that, for the purpose of intensifying the process and reducing the work area, the very articles being processed are used as the electrodes, being separated in the drum or vibrating container into two parts by a perforated separation partition, with the electrochemical disolution carried out by means of alternating current realizing a constant circulation of the electrolyte, and with the current source being switched off during finishing treatment.

2. Method for electrochemical grinding and polishing of articles in a drum described

L 39050-66 EWT(m)/T/EWP(t)/ETI IJP(c) JD/WB

ACC NR: AP6020917 (A) SOURCE CODE: UR/0369/66/002/002/0200/0203

51
B

AUTHOR: Gorbunov, S. A.; Korolev, N. V.; Tikhomirov, V. I.

ORG: Leningrad State University im. A. A. Zhdanov (Leningradskiy gosudarstvennyy universitet)

TITLE: Participation of nitrogen in the oxidation of titanium in air at high temperatures

18 18 27

SOURCE: Fiziko-khimicheskaya mekhanika materialov, v. 2, no. 2, 1966, 200-203

TOPIC TAGS: nitrogen, titanium, metal oxidation, high temperature oxidation

ABSTRACT: The main purpose of the work was to determine nitrogen directly in the surface layer of specimens of VT1 titanium alloy oxized in air at 800-1200°, using spectral analysis and microhardness measurements. The surface gas-saturated layer on specimens oxidized at 1100-1200° was found to have a high nitrogen content (up to 3%). The main cause of the enrichment of the metal surface layer with nitrogen following oxidation in air at 1100-1200° is thought to be the reaction of titanium with atmospheric nitrogen. No pure nitride compounds are formed; the surface consists of a complex interstitial solid solution of oxygen, nitrogen, and partially carbon in α-titanium. This is due to the characteristics of the structure α-Ti, which has octahedral voids of large size. The participation of atmospheric nitrogen in the oxidation of titanium at high temperatures affects the entire oxidation process. Orig. art. has: 1 figure and

Card 1/2

L 05193-67 EWT(1)

ACC NR: AP6012150

SOURCE CODE: UR/0413/66/000/007/0069/0069

AUTHOR: Korolev, N. V.

44
B

ORG: none

15

TITLE: An interferometer with a quantum generator. Class 42, No. 180377

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 7, 1966, 69

TOPIC TAGS: quantum generator, interferometer

ABSTRACT: This Author Certificate presents an interferometer with a quantum generator (see Fig. 1). To simplify its design and to increase the measurement accuracy, the control surface is semitransparent and established in the same branch as the investigated system or detail.

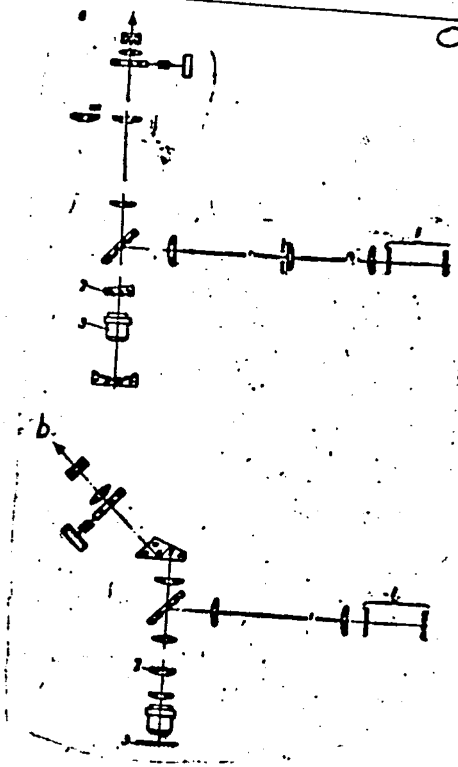
Card 1/2

UDC: 535.411

L 05193-67

ACC NR: AP6012150

Fig. 1. 1 - optical quantum generator; 2 - control surface; 3 - investigated system or detail.



Orig. art. has: 1 figure.

SUB CODE: 20/ SUBM DATE: 17Oct64

Card 2/2 vmb

POPOV, A.N.; MAKAROV, P.A.; KOROLEV, N.Ye., inzh., retsenzent

[Equipment for the production of concrete and reinforced concrete pipe] Oborudovanie dlia proizvodstva betonnykh i zhelezobetonnykh trub. Moskva, Mashinostroenie, 1965. 183 p. (MIRA 18:8)

KOROLEV, N. Ye., inzh.; TUMARKIN, P.I., inzh.

Equipment for molding three-dimensional reinforced concrete bathrooms. Stroi. i dor. mash. 10 no.1:25-26 Ja '65 (MIRA 18:2)

KOROLEV, N.Ye., inzh.

Automatic batch weighers for cement. Stroi. i dor. mash. 10 no.2: 31-33 F '65.
(MIRA 18:3)

ACC NR: AP6033438 SOURCE CODE: UR/0051/66/021/004/0456/0459

AUTHOR: Shalimova, K. V.; Khirin, V. N.; Korolev, O. I.

ORG: none

TITLE: Temperature dependence of the absorption, reflection, emission, and excitation spectra and of the quantum yield of luminescence in polycrystalline films of cadmium sulfide

SOURCE: Optika i spektroskopiya, v. 21, no. 4, 1966, 456-459

TOPIC TAGS: cadmium sulfide, absorption spectrum, emission spectrum, excitation spectrum, quantum yield, luminescence spectrum, semiconducting film, temperature dependence

ABSTRACT: This is a continuation of earlier work (DAN SSSR v. 139, 938, 1961) on the temperature dependence of the absorption and reflection of cadmium sulfide films, where a photographic procedure was used. In the present study, the tested polycrystalline films were of hexagonal modification, and were prepared by a thermal sublimation of the initial substance in vacuum, using a procedure described by the authors elsewhere (Kristallografiya v. 8, 774, 1963). The temperature dependence of the spectra and of the quantum yield were measured with an optical system based on a spectrometer (DFS-12), universal monochromator (UM-2), a double monochromator (DMR-4), and a photoelectronic continuous spectrum recorder (FEP-1). The absorption spectra in the temperature range 77 - 300K were plotted with a recording spectrophotometer SF-10. The

Card 1/2 UDC: 535.34 + 535.37.096

ACC NR

use of the spectrophotometer in the present investigation made it possible to determine the absorption coefficient more accurately with allowance for reflection. The results show that all the absorption bands shift toward longer wavelengths with increasing temperature. The shift is linear. In addition, the bands become deformed with increasing temperature and their half-width increases. The quantum yield was also investigated by the authors earlier (Opt. i spektr. v. 20, 1063, 1966). The luminescence spectrum, on the other hand, shifts toward shorter wavelengths, with all bands of the spectrum experiencing an equal shift. The relative quantum yield of the luminescence decreases with increasing temperature. The temperature dependence of the photoluminescence is the same for different excitation wavelengths, agreeing well with the Gurney and Mott relation. Orig. art. has: 3 figures and 2 formulas.

SUB CODE: 20/ SUBM DATE: 07Apr65/ ORIG REF: 005/ OTH REF: 003

Card 2/2

L 42898-66 EWT(1)/EWT(m)/EWP(t)/ETI IJP(c) JD/GG

ACC NR: AP6018447 SOURCE CODE: UR/0051/66/020/006/1063/1065

AUTHOR: Shalimova, K. V.; Khirin, V. N.; Korolev, O. I.

74
B

ORG: none

TITLE: Spectral distribution of relative quantum yield for photoluminescence of polycrystalline cadmium sulfide films at 77°K

SOURCE: Optika i spektroskopiya, v. 20, no. 6, 1966, 1063-1065

TOPIC TAGS: cadmium sulfide, photoluminescence, light excitation, excitation spectrum, absorption spectrum, spectrophotometry, quantum yield, monochromator, semiconducting film, polycrystalline film

ABSTRACT: The absorption, reflectance, excitation and quantum yield of luminescence from polycrystalline cadmium sulfide films at liquid nitrogen temperature (77°K) were investigated. In the corresponding spectra in the 210-360 mμ region, four broad bands with maxima at 330, 290, 240 and 215 mμ were observed while a fine structure consisting of 4-5 bands was observed in the 460-490 mμ region. The spectral distribution of green luminescence of polycrystalline CdS films is independent of the wavelength of the excitation light. The radiation intensity of this luminescence is directly proportional to the intensity of the excitation light over three orders of magnitude. These conclusions are based on a series of measurements carried out by the authors on hexa-

UDC: 535.37

Card 1/2

L 39414-65 EWT(l)/EWT(m)/EWP(t)/EWP(b) Pi-4 IJP(c) JD

ACCESSION NR: AP5006056 S/0139/65/000/001/0080/0084

AUTHOR: Shalimova, K. V.; Khirin, V. N.; Korolev, O. I.

33

32

B

21

TITLE: Photoluminescence of polycrystalline films of cadmium sulfide at 77K

18 27 1

SOURCE: IVUZ. Fizika, no. 1, 1965, 80-84

TOPIC TAGS: photoluminescence, cadmium sulfide, polycrystal, thin film, spectral composition, luminescence excitation, fine structure

14

ABSTRACT: A study was made of the spectra of absorption, reflection, emission, and luminescence excitation of polycrystalline CdS films at 77K, in the wavelength range 4500—5500 Å. These investigations are of interest because a detailed study of photoluminescence of CdS films was never made before. The films were obtained by thermal sublimation of powder in an atmosphere of argon or hydrogen sulfide in vacuum with subsequent crystallization on heated and unheated substrates. Samples sublimated on substrates heated below 350C, regardless of the atmosphere in which they were prepared, have absorption and emission spectra of simple form. Films sputtered on substrates heated above 350C have a fine structure in the absorption,

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L 39414-65
ACCESSION NR: AP5006056

reflection, luminescence excitation, and emission spectra, due to transitions between the ground level of the excess cadmium atom and its excited levels. Four maxima at 4545, 4605, 4670, and 4740 Å were observed in the excitation spectra of blue luminescence. The spectral distribution of the luminescence of the films was independent of the exciting wavelength in the 2200—4900 Å range. A fine structure in the absorption, reflection, luminescence excitation, and emission spectra was observed only for films having hexagonal-symmetry lattices. Orig. art. has: 3 figures.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Power Engineering Institute)

SUBMITTED: 28Apr63	ENCL: 00	SUB CODE: OP, SS
NR REF SOV: 019	OTHER: 001	

Card 2/2

KOROLEV, P., inzh.

Chain saw for longetudinal splitting of cattle carcasses.
Mias. ind. SSSR 30 no.5:47-49 '59. (MIRA 13:1)

1.Moskovskiy tekhnologicheskiy institut myasnoy i molochnoy promyshlennosti.
(Meat industry--Equipment and supplies)

KOROLEV, P.

Wholesale centers and local industry. Sov. torg. no.10:11-13
O '58. (MIRA 11:10)

(Shoe industry)

KOROLEV, P.

A wholesale base supplies cities and villages. Sov.torg. 33 no.2:35-38 F '60. (MIRA 13:5)
(Lvov--Boots and shoes)

L 54849-65

ACCESSION NR: AP5014673

UR/0348/65/000/006/0024/0025
632.952

AUTHORS: Korolev, P. (Engineer, Chemist); Nikiforov, A. (Agronomist)

8
B

TITLE: Promising fungicides

SOURCE: Zashchita rasteniy ot vrediteley i bolezney, no. 6, 1965, 24-25

TOPIC TAGS: agriculture, fungus, fungicide

ABSTRACT: In recent years the MSKh SSSR State Committee for chemical means of controlling agricultural pests, diseases, and weeds has tested foreign and domestic fungicides. It recommends the release of the following types. N-trichloromethylthiotetrahydrophthalamide, 2,3-dichloro-naphthoquinone-1,4-, mercurohexane (.% ethylmercurochloride, 20% hexachlorobenzene, 12% gamma isomer GKhTsG, and 6'% filler), phthalane (the active part of N-trichloromethylthiophthalamide), copper oxychloride, zinc ethylenebisdithiocarbamate, and zinc dimethyldithiocarbamate. The article contains physical descriptions, the necessary amounts, the modes of application, the times of application, the action, and other characteristics of the above substances.

ASSOCIATION: none

Card 1/2

L 54849-65
ACCESSION NR: AP5014673

0

SUBMITTED: 00 ENCL: 00 SUB CODE: LS

NO REF SOV: 000 OTHER: 000

Card 2/2

KOROLEV, P., inzh.-khimik

How to store herbicides. Zashch. rast. ot vred. i bol. 10
no.1:33-34 '65. (MIRA 18:3)

KOROLEV, P. A.

PA 4T120

USSR/Physics
Spectrographic analysis

1945

"A Spark Generator with Forced Ignition for Spectroscopic Analysis," P. A. Korolev, 2 pp

"Cr Acad Sci" Vol XLIX, No 9

A spark generator controlled by a low-power auxiliary circuit, permitting careful control and ensuring maximum reproducibility of electrical conditions

4T120

FAVER, G.L.; KOROLEV P.A., kandidat meditsinskikh nauk, direktor; CHERNYAKOV, G.A., ispolnyayushchiy obyazonosti glavnogo vracha.

Effect of magnesic solutions of penicillin upon the culture of staphylococcus aureus; author's abstract. Zhur.mikrobiol.epid.i immun. no.2:53 F '53. (MLRA 6:5)

1. Krymskiy institut epidemiologii i mikrobiologii (for Korolev). 2. Nizhegorskaya rayonnaya bol'nitsa (for Chernyakov). (Penicillin) (Staphylococcus)

KOROLEV, P.A.

KOROLEV, P.A.; MARKOV, T.L.; TIKHOMIROVA, N.I.

[redacted]

Result of eradication of an endemic focus of pappataci fever. Med. paraz. i paraz. bol. no.4:344-347 O-D '54. (MLRA 8:2)

1. Iz Simferopol'skoy protivomalyariynoy stantsii (glavnyy vrach N.I.Tikhomirova) i kafedry infektsionnykh bolezney i epidemiologii (zav. prof. V.M.Donrachev) Krymskogo meditsinskogo instituta imeni I.V.Stalina.

(PAPPATACI FEVER, prevention and control,
in Russia, liquidation of endemic focus with DDT & benzine hexachloride)

(DDT,
pappataci fever control)

(BENZINE HEXACHLORIDE,
pappataci fever control)

EXCERPTA MEDICA Sec 4 Vol. 10/9 Microbiology Sept 57

2148. KOROLEV P. A., and KOLTYPINA A. P. Infect. Dis. Clin. of the Crimean Med. Inst. and the Reg. Sanit. and Epidemiol. Station, Simferopol, USSR.* Clinical and epidemiological data on Q fever in the Crimea (Russian text) Ž. MIKROBIOL. 1956, No. 7 (10-15)

In 1952 Dr. Teverovckaya reported the first cases of Q fever in the Crimea. In 1954-55 the authors investigated 260 acutely febrile patients. In 24 cases, using agglutination and complement-fixation reaction, Q fever was diagnosed. The clinical picture of the illness was characterized by moderate severity with a febrile period of about 10 days and with no pathological signs in the respiratory organs. The authors think that the infection with Q fever was acquired through milk and only in occasional cases through contact with domestic animals. During the period of the investigation not a single case of Q fever was noted among the workers at the meat combine, tannery, raw hide depot etc. Among 115 workers in these industries positive complement fixation reactions were detected in only 4. Among the cattle, sheep and goats of different areas of the Crimea region, positive reactions to Q-antigen are found in up to 13.5% of animals, but incidence in humans is limited to occasional cases. The authors explain this phenomenon by the small number of animals which excrete the causative organism into the outer environment and also by the low infectivity of the organism to man. Kaulen - Moscow

KOROLEV, P.A., dotsent

Device for working with pipettes. Gig. i san. 21 no.9:80 S '56.
(MLRA 9:10)

1. Iz Krymskogo meditsinskogo instituta.
(PIPETTES)

KOROLEV, P.A.; KOLOTYGINA, A.P.

Clinical and epidemiological data on Q fever in Crimea. Zhur.mikrobiol.epid. i immun. 27 no.7:10-15 Jy '56. (MLRA 9:9)

1. Iz kliniki infektsionnykh bolezney Krymskogo meditsinskogo instituta imeni Stalina i Oblastnoy sanitarno-epidemiologicheskoy stantsii.

(Q FEVER, epidemiol.
in Russia, Crimea)

Abstract in Sum. 1085, 9 Oct 56

KOROLEV, P.A.; KONSTANT, Ye.G.

Oral immunization with living brucellosis vaccine; author's abstract.
Zhur. mikrobiol. epid. i immun. 31 no. 10:103 O '60. (MIRA 13:12)

1. Iz kafedry infektsionnykh bolezney Krymskogo meditsinskogo instituta i Oblastnoy sanitarno-epidemiologicheskoy stantsii.
(BRUCELLOSIS)

KOROLEV, P.A.; TOLSTOV, K.S.

Smoke generator of a multiple effect. Zashch. rast. ot vred. i bol. 6 no.12:9-11 D '61. (MIRA 16:5)

LUCHINSKIY, G.P., doktor khimicheskikh nauk; TOLSTOV, K.S., kand.tekhnicheskikh
nauk; KOROLEV, P.A.

Use of haxachloran in insecticidal fumigants. Khim.prom. no.4:235-237 Ap '61. (MIRA 14:4)

(Cyclohexane) (Insecticides)

KOROLEV, P.A.

Lime-sulphur mixture. Zashch. rast. ot vred. i bol. 6 no.3:45-46 Mr '61. (MIRA 15:6)

(Insecticides) (Fungicides)

KOROLEV, P.A.

Herbicides, derivatives of 2,4-dichlorophenoxyacetic acid. (MIRA 15:12)
Zashch.rast.ot vred.i bol. 7 no.4:47-49 Ap '62.
(2,4-D)

KOROLEV, P.A.; NIKIFOROV, A.M.; SHAPIRO, I.D.; VILKOVA, N.A.; DROZDOVSKIY, E.M.

Questions and answers. Zashch. rast. ot vred. i bol. 8 no.2: 39-40 F '63. (MIRA 16:7)

(Plants, Protection of)

KOROLEV, P.A.

Procedure for testing new preparations. Zashch. rast. ot vred. i bol. 8 no.3:25 Mr '63. (MIRA 17:1)

KOROLEV, P.A.; KORNAUSHKIN, V.

Questicns and answers. Zashch. rast. ot vred. i bol. 9 no.3:40 '64. (MIRA 17:4)

1. Inspektor otdela Vsesoyuznogo tsentral'nogo soveta professional'nykh soyuzov po proizvodstvennoy rabote i zarabotnoy plate v sel'skom khozyaystve (for Kornaushkin).

KOROLEV, P.A.

Questions and answers. Zashch. rast. ot vred. i bol. 9 no.1:42 '64. (MIRA 17:4)

KOROLEV, P.A., inzh.-khimik

The acaricide chloroethanol. Zashch. rast. ot vred. i bol. 9 no.7:33-34 '64. (MIRA 18:2)

KALASHNIKOV, K.Ya., kand. sel'skokhoz. nauk; BRUDNAYA, A.A., kand. sel'skhokhoz. nauk; ZUBOV, M.F., kand. sel'skokhoz. nauk; KOROLEV, P.A., inzh.-khimik; NIKIFOROV, A.M.

Questions and answers. Zashch. rast. ot vred. i bol. 9 no.8:34-35 '64. (MIRA 17:12)

LEONT'YEV, Ivan Ivanovich; ABUKHOV, Leontiy Grigor'yevich; KOROLEV, P.F., redaktor; DASHKOVA, Z.F., redaktor; VOLKHOVER, R.S., tekhnicheskiy redaktor.

[Bent-wood furniture production] Proizvodstvo gnutoi mebeli. Moskva, Goslesbumizdat, 1954. 119 p. (MLRA 8:5)
(Furniture industry)

KOROLEV, P.G.

Work of a geographical study group. Geog. v shkole 21 no.2:57-58 Mr-Ap '58. (MIRA 11:2)

1.Shkola No. 689, Moskva.
(Geography--Study and teaching)

KOROLEV, P.G. [Korol'ov, P.H.]; PANICH, P.N. [Panych, P.N.]

Dust protecting device for the land wheel bushing of the P-5-35M plow. Mekh. sil'. hosp. 9 no.10:28-29 O '58. (MIRA 11:10)

1. Ukrainskaya akademiya sel'skokhozyaystvennykh nauk.
(Plows)

KIM Khan Chzhu; KHON Dal' Son; KOVALEV, V.P. [translator, deceased]; KAZAKEVICH, I.S., red.; KOROLEV, P.G., red.; ZAKHMATOVA, M.R., red. izd-va; BERESLAVSKAYA, L.Sh., tekhn. red.

[Cooperative agriculture in the Korean People's Democratic Republic] Kooperirovanie sel'skogo khoziaistva v Koreiskoi Narodno-Demokraticheskoi Respublike. Moskva, Izd-vo vostochnoi lit-ry, 1961. 131 p. (MIRA 14:12)
(Korea, North—Agriculture, Cooperative)

BELYAYEV, Yu.N.[translator]; KOROLEV, P.G.[translator]; TIKHOMIROV, V.D.[translator]; PIMENOV, B.K., red.; MILITAREVA, Yu.E., red.; KHAR'KOVSKAYA, L.M., tekhn. red.

[National economic development of the Korean People's Democratic Republic after the liberation]Razvitie narodnogo khoziaistva Koreiskoi Narodno-Demokraticheskoi Respubliki posle osvobozhdeniia. Pod red. I s predisl. B.K.Pimenova. Moskva, Izd-vo inostr. lit-ry, 1962. 337 p. Abridged translation from the Korean. (MIRA 15:12)

(Korea, North--Economic conditions)

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

COMMON ELEMENTS

COMMON VARIABLES INDEX

18

APPARATUS FOR THE MECHANICAL TESTING OF LOCOMOTIVE AND OTHER PISTON RINGS. P.G. Korolev. (Zavodskaya Laboratoriya, 1948, vol 14, Oct., p 1271. (in Russian). A simple apparatus is described by which the magnitudes of the elastic and residual deformation of a ring under concentrated stresses can be determined.—S.K.

OPEN

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1ST AND 2ND LETTER

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18

COMMON ELEMENTS

Measurement of the Number of Revolutions of Centrifugal Velocity Impact Machines, and of the Work Performed in the Fracture of the Specimen. P. G. Korolev. (Zavodskaya Laboratoriya, 1949, vol. 15, June, pp. 723-726). [In Russian]. In the testing machine considered, the specimen is fractured by the impact of a knife fixed to the rim of a disc rotating freely at a known speed. The loss of energy due to the impact is calculated from the corresponding decrease in speed, and the requirements of a device for automatically recording such decreases for the high frequencies encountered are discussed. A description is given of a 'beat-frequency' apparatus developed for this purpose by means of which the frequency of revolution just before the impact, as well as the change in frequency on impact, can be automatically recorded.—s. K.

COMMON VARIABLES

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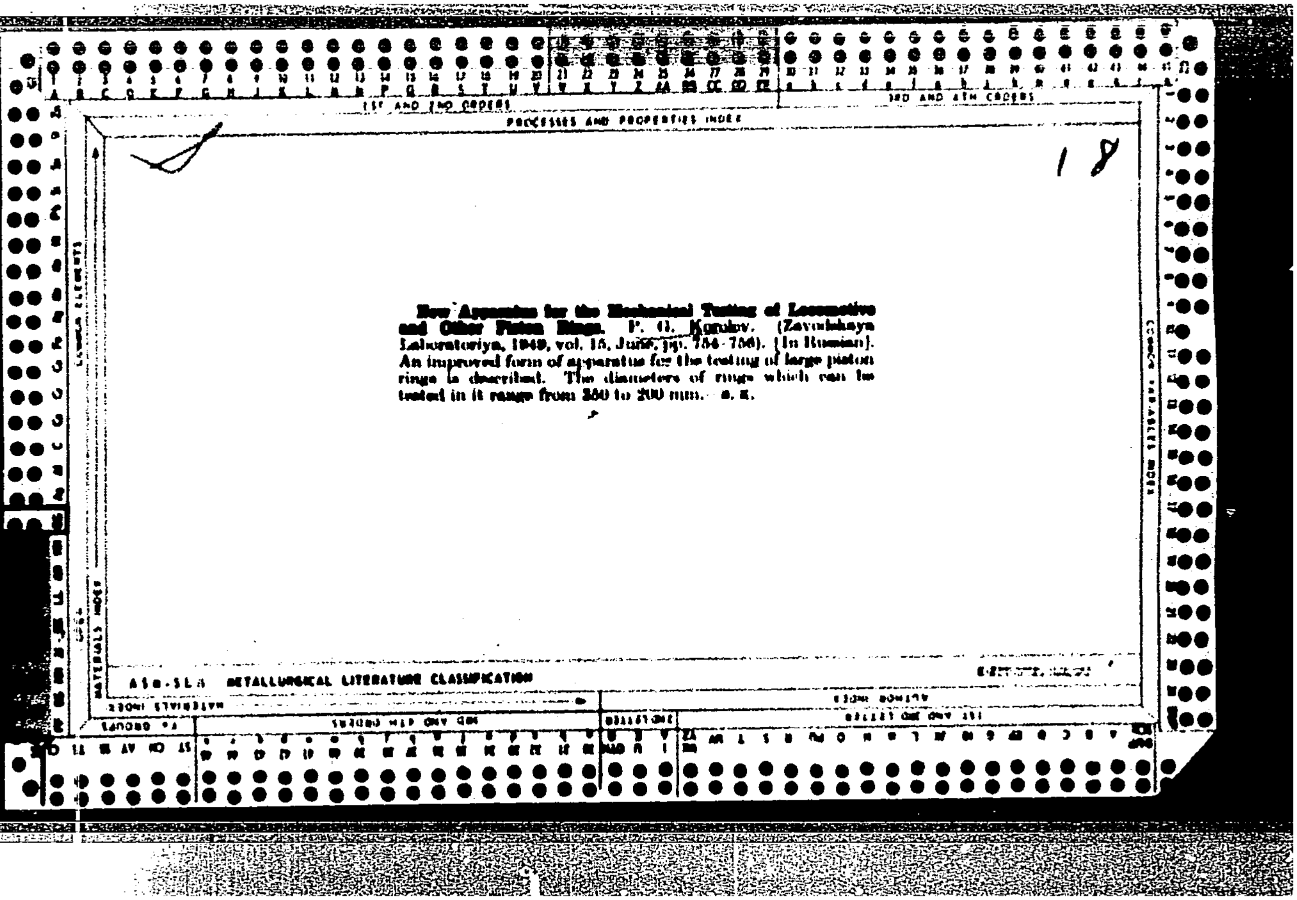
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



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3RD AND 4TH ORDERS

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18

New Apparatus for the Mechanical Testing of Locomotive and Other Piston Rings. P. G. Korolev. (Zavodskaya Laboratoriya, 1949, vol. 15, June, pp. 754-756). [In Russian]. An improved form of apparatus for the testing of large piston rings is described. The diameters of rings which can be tested in it range from 350 to 200 mm. – s. K.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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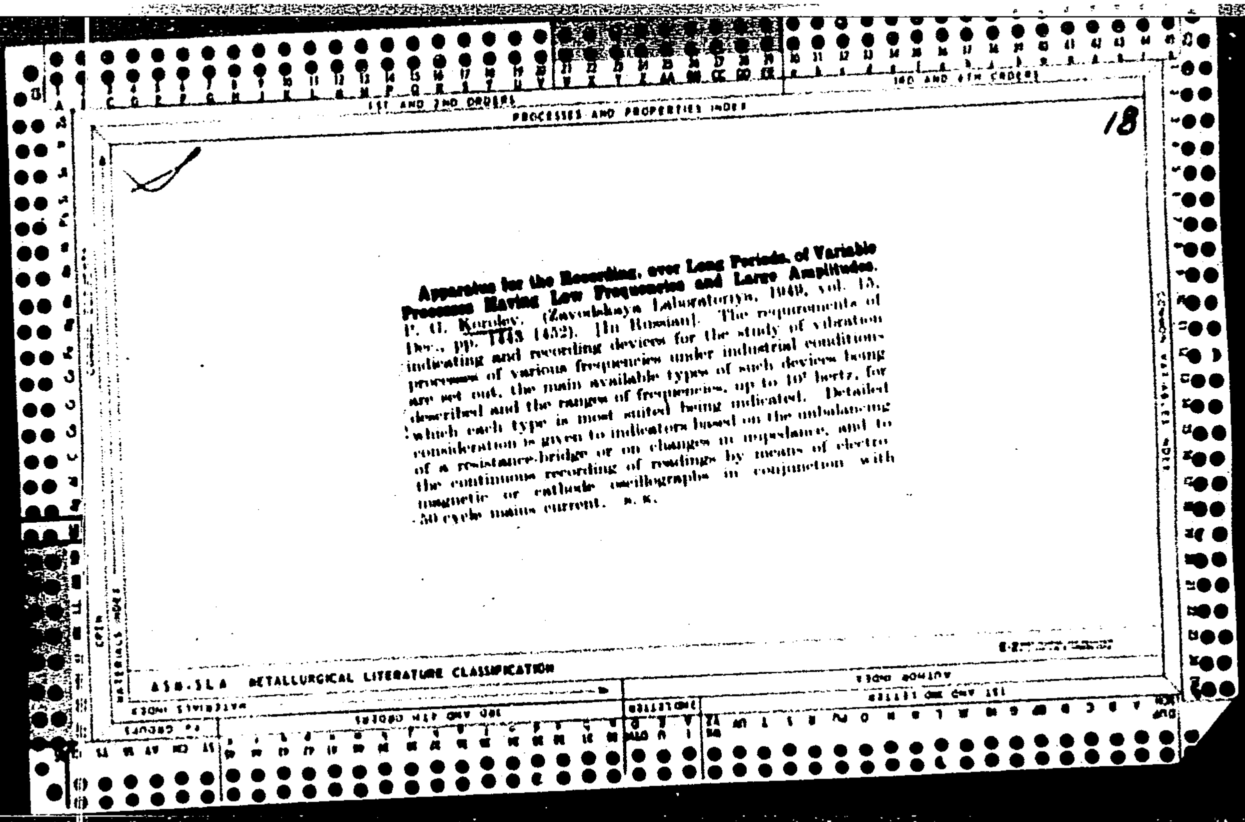

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18

Apparatus for the Recording, over Long Periods, of Variable Processes Having Low Frequencies and Large Amplitudes. P. G. Korolev. (Zavodskaya Laboratoriya, 1949, vol. 15, Dec., pp. 1448 1452). [In Russian]. The requirements of vibration indicating and recording devices for the study of processes of various frequencies under industrial conditions are set out, the main available types of such devices being described and the ranges of frequencies, up to 10^4 hertz, for which each type is most suited being indicated. Detailed consideration is given to indicators based on the unbalancing of a resistance-bridge or on changes in impedance, and to the continuous recording of readings by means of electromagnetic or cathode oscillographs in conjunction with 50 cycle mains current. N. K.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

KOROLEV, P.G.

Experimental plotting of curves indicating the starting and stopping of lathe spindles. Stan. i instr. 25 no.7:10-11 Jl '54.
(Lathes) (MIRA 7:8)

SOV/109-59-4-2-15/27

AUTHOR: Korolev, P.G.

TITLE: The Possibility of a Further Generalization of the Quasi-Linear Theory of Single-Stage LC-Oscillators (O vozmozhnosti dal'neyshego ooobshcheniya v kvazilineynoy teorii odnokonturnykh LC-generatorov)

PERIODICAL: Radiotekhnika i Elektronika, 1959, Vol 4, Nr 2, pp 262-271 (USSR)

ABSTRACT: A simple LC-oscillator, shown in Fig 1, is considered. Here z_1, z_2 and z_3 are constant parameters, E_a and E_g are direct voltages, $e_c = E_c \cos \omega_c t$ is the voltage of an external signal and $u = E_g + V \cos (\omega t + \varphi)$ is the voltage in the grid circuit. The oscillator can be described by a system of simplified equations (Ref 1 and 6):

$$\frac{dV}{dt} = -\delta V(1 - kR_Э SB) = P(V,\varphi),$$
$$\frac{d\varphi}{dt} = \Delta\omega - \delta k R_Э S_M = Q(V.\varphi), \qquad (1)$$

where $\delta = \frac{1}{2R_Э C}$ is the damping coefficient of the

Card 1/4

SOV/109-59-4-2-15/27

The Possibility of a Further Generalization of the Quasi-Linear Theory of Single-Stage LC-Oscillators

of Eq (14) are expressed by Eq (17) and (18). The variables V and φ in Eq (14) cannot be separated and it is therefore possible to determine the transients of V and φ only if the amplitude of the external voltage is comparatively small (Ref 7 and 8). Under this assumption, Eq (1) can be represented as Eq (20) where various parameters are defined on page 268. The solution of Eq (20) is in the form of Eq (23). This defines the phase transient in a synchronized oscillator, but the phase is not defined completely since the transient depends on the initial phase of the oscillator. The transient of the amplitude of the oscillator is expressed by the last equation on p 270. The author makes acknowledgment to the corresponding member of the Academy of Science of the USSR Yu.B.Kobzarev and to Professor M.I.Kontorovich for

Card 3/4

SOV/109-59-4-2-15/27

The Possibility of a Further Generalization of the Quasi-Linear Theory of Single-Stage LC-Oscillators

reading the manuscript and their valuable remarks. There are 3 figures and 13 Soviet references.

SUBMITTED: 25th April 1957

Card 4/4

KOROLEV, P.I.

Changing designs of shock absorbers of the EPM-1 rock loader. Suggested by P.I. Korolev. Rats. predl. no. 43:13 '59.
(MIRA 14:1)

(Shock absorbers)

KOROLEV, P. N.

Carding Machines

Increasing the package of can roving frames RTP-192 Tekst. prom. no. 5, 1952.

9. Monthly List of Russian Accessions, Library of Congress, August 195~~3~~. Unclassified.
2

DEMIN, A.I.; KOROLEV, P.F.

Portable unit for testing electric measurement instruments. Rats. predl. na gor. elektrotransp. no.9:58-59 '64. (MIRA 18:2)

1. Trest "Moselektrotrans".

[illegible]

Portable unit for testing relay protection. Rats. predl. na gor. elektrotransp. no.9:59-61 '64. (MIRA 18:2)

1. Trest "Moselektrotrans".

ANISKIN, L.; BARANCHUK, P.; KOROLEV, R.

Analysis of basic structural parameters of air-heating units for motor vehicles. Avt. transp. 43 no.8:13-17 Ag '65. (MIRA 18:9)

1. Chelyabinskiy politekhnicheskiy institut.

ANISKIN, L., kand. tekhn. nauk; KICHIGIN, Ye., kand. tekhn. nauk; KOROLEV, R., inzh.

Air heating of motor vehicles outside of garages. Avt.transp. 42 no.3:19-20 Mr '64. (MIRA 17:4)

DAVYDENKO, K.; KOROLEV, S.; CHERNOUSOV, M.; ZHUKOV, M., red.; AYZUPIYETE, M. [Aizupiete, M.], tekhn.red.

[Flax, the northern silk; from the experience of the "Krasnyi Oktiabr'" Collective Farm, Preyli District] Len - severnyi shelk; iz opyta kolkhoza "Krasnyi Oktiabr'", Preil'skogo raiona. Riga, Latviiskoe gos.izd-vo, 1960. 72 p. (MIRA 14:12)

(Preyli District--Flax)

BELYAYEVA, Z.; BUDARIN, V.; VASHENTSEVA, Ye.; KOPTEV, M.; KOROLEV, S.; MESHCHERYAKOV, V.; SENIN, S.; KONAKOV, D., otv.red.; ROCHKO, V., red.; SOSKIN, A., red.

[Political economy; a manual of visual aids] Politicheskaia ekonomiia; nagliadnoe posobie. Otvetstvennyi red. D.Konakov. Moskva, Gos.izd-vo polit.lit-ry, 1959. 159 p. (MIRA 13:3)

(Economic history) (Audio-visual aids)

KOROLEV, S., inzh.; LAVRENT'YEV, V., inzh.; ANAGORSKIY, L., red.; ROMANNIKOV, F., red.izd-va; KARZHAVINA, Ye., tekhn.red.

[Build-up welding of standard parts] Naplavka tipovykh detalei. Lipets, Lipetskoe knizhnoe izd-vo, 1962. 65 p. (MIRA 17:3)

1. Svarochnoye byuro Lipetskogo traktornogo zavoda (for Korolev, Lavrent'yev).

KOVALEVA, A.F.; KOROLEV, S.A.; KOCHETOVSKAYA, T.N.; LARIONOV, M.P.; MARTYNENKO, L.M.; SAVEL'YEV, Ye.A.; KOZLOV, G.A., otv. red.; SOSKIN, A.M., red.

[Album of visual aids on economics; the section "Sosialism."] Al'bom nagliadnykh posobii po politicheskoi ekonomii; razdel "Sotsializm." Leningrad, Gospolitizdat, 1960. 40 plates (MIRA 15:11)

(Economics—Audio-visual aids)

VOLKOV, M.I., dots.; **KOROLEV, S.A.; LOPATKIN, V.G., dots.;** TOKAREV, A.P.;
KOZLOVA, G.A., prof., red.; KOKOSHKO, A.G., red.; MARTYNOVA,
M.N., tekhn. red.

[Socialist means of production] Sotsialisticheskii sposob proizvodstva. Moskva, Izd-vo "Mysl'." No.3. [Funds of socialist enterprises and the formation of net income in a socialist enterprise] Fondy sotsialisticheskikh predpriiatii i obrazovanie chistogo dokhoda v sotsialisticheskom khoziaistve. 1964. 186 p. (MIRA 17:4)

1. Kommunisticheskaya Partiya Sovetskogo Soyuza. Vysshaya partiynaya shkola. Kafedra politicheskoy ekonomii.

ACC NR: AR6035366 SOURCE CODE: UR/0271/66/000/009/B003/B003

AUTHOR: Korolev, S. A.

TITLE: Synthesis of circuits that check the fulfillment of relation $|X - Y| \leq A$

SOURCE: Ref. zh. Avtomatika, telemekhanika i vychislitel'naya tekhnika, Abs. 9B20

REF SOURCE: Sb. Vychisl. tekh. v mashinostr. Minsk, 1966, 77-83

TOPIC TAGS: circuit theory, computer design, binary number, Boolean function, computer logic, ~~compute~~r switching circuit, comparison circuit, adder

ABSTRACT: In solving various problems it is frequently necessary to check whether the condition $|X - Y| \leq A$ is satisfied; here X and Y are n-digit binary numbers of the form

$$X = 2^{n-1}x_n + \dots 2^{i-1}x_i + \dots + x_1,\ Y = 2^{n-1}y_n + \dots + y_1,$$

x_i and y_i are binary variables which take on values 0 and 1, and

$$A = 2^{m-1} + 2^{m-2} + \dots + 1 = 2^m - 1.$$

This problem is usually solved by using adders and comparison circuits, which are quite complicated devices. A procedure is discussed for the synthesis of circuits that check the foregoing conditions and are based on universal fluid jet switches, which realize the two Boolean functions a = cx and b = cz, using OR elements and communications. The procedure described for the synthesis is based on the general method of synthesizing

UDC: 681.142.1

Card 1/2

ACC NR

switching networks, developed by A. Sh. Blokh. 1 table. Bibliography, 4 titles.
G. V. [Translation of abstract]

SUB CODE: 09, 12

Card 2/2

L 8677-65 EWT(1)/EWA(h) Pob AFMD(p)/AFETR/ASD(d)/ASD(a)-5/APGC(b)/RAEM(1)/
ESD(dp) GG

ACCESSION NR: AP4045689 S/0250/64/008/008/0501/0504

AUTHOR: Korolev, S.A.

TITLE: Synthesis of systems designed for pneumatic switches 25 B

SOURCE: AN BSSR. Doklady*, v. 8, No. 8, 1964, 501-504

TOPIC TAGS: automation, control system, pneumatic control system, pneumatic switch, system design

ABSTRACT: A pneumatic switch with a single controlling input, which was developed at the Institut Avtomatiki i Telemekhaniki AN SSSR (Institute of Automation and Telemechanics), can be used to carry out two Boolean operations. These switches can be combined so as to represent more complicated Boolean functions by using a canonical truth table described by A. Sh. Blokh in earlier papers. An example of such a function is given together with its representation in a canonical table and a schematic switching diagram. An expression is also given for the number of switches required as the dimensionality of the Boolean function goes to infinity. In discussing other examples, it is pointed out that the table can be constructed either from the bottom upward or from the top downward. When the function can be factored, all canonical tables reduce to one

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table, and the synthesis of such a table is carried out from the bottom up. The combined method of synthesis may also be used, by dividing the table into two parts and synthesizing one part from the top down and the other from the bottom up. An example of this kind is then given. "The author thanks A. Sh. Blokh for suggesting the problem and for his constant advice." Orig. art. has: 4 tables, 2 figures and 4 equations.

ASSOCIATION: Institut matematiki i vy*chislitel'noy tekhniki AN BSSR (Institute of Mathematics and Computers Technology, AN BSSR)

SUBMITTED: 30Nov63 ENCL: 00 SUB CODE: IE

NO REF SOV: 003 OTHER: 000

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KOROLEV, Sergey Arkad'yevich; ASTAKHOV, V.D., red.; NAUMOV, K.M.,
tekhn. red.

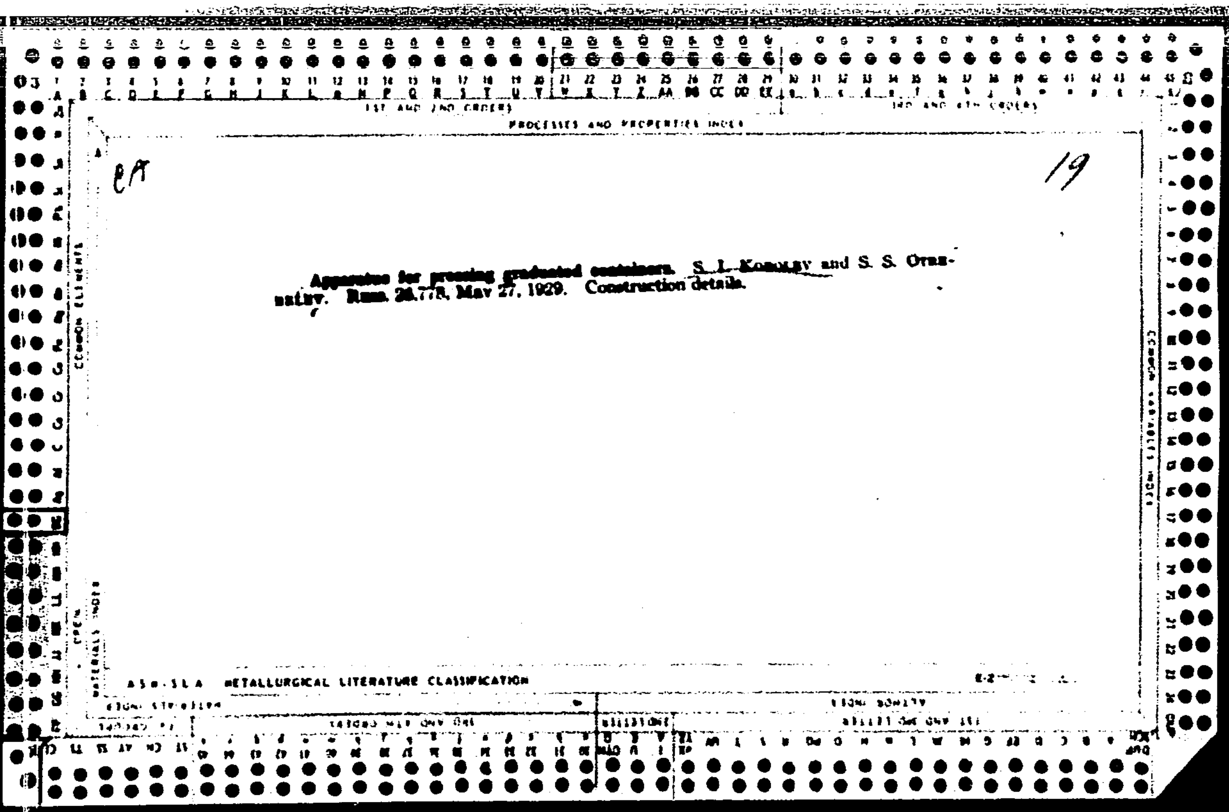
[Development of collective farm property at the present stage of the building of communism in the U.S.S.R.]Razvitie kolkhoznoi sobstvennosti na sovremennom etape kommunisticheskogo stroitel'stva v SSSR. Moskva, Izd-vo VPSh pri TsK KPSS, 1962. 103 p. (MIRA 15:11)

(Collective farms—Interfarm cooperation)
(Property)

KOROLEV, S. I.

"O nekotorykh metodakh sravnitel'nogo izucheniya sovremennogo obshchestva."

report submitted for 7th Intl Cong, Anthropological & Ethnological Sciences, Moscow, 3-10 Aug 64.



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19

Apparatus for pressing graduated containers. S. I. Komolov and S. S. Oraznatsv. Russ. 28,778, May 27, 1929. Construction details.

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Forming glass-melting crucibles. S. I. Kobolev and P. V. Bromley. Russ. 28,148, Oct. 17, 1931. Construction details.

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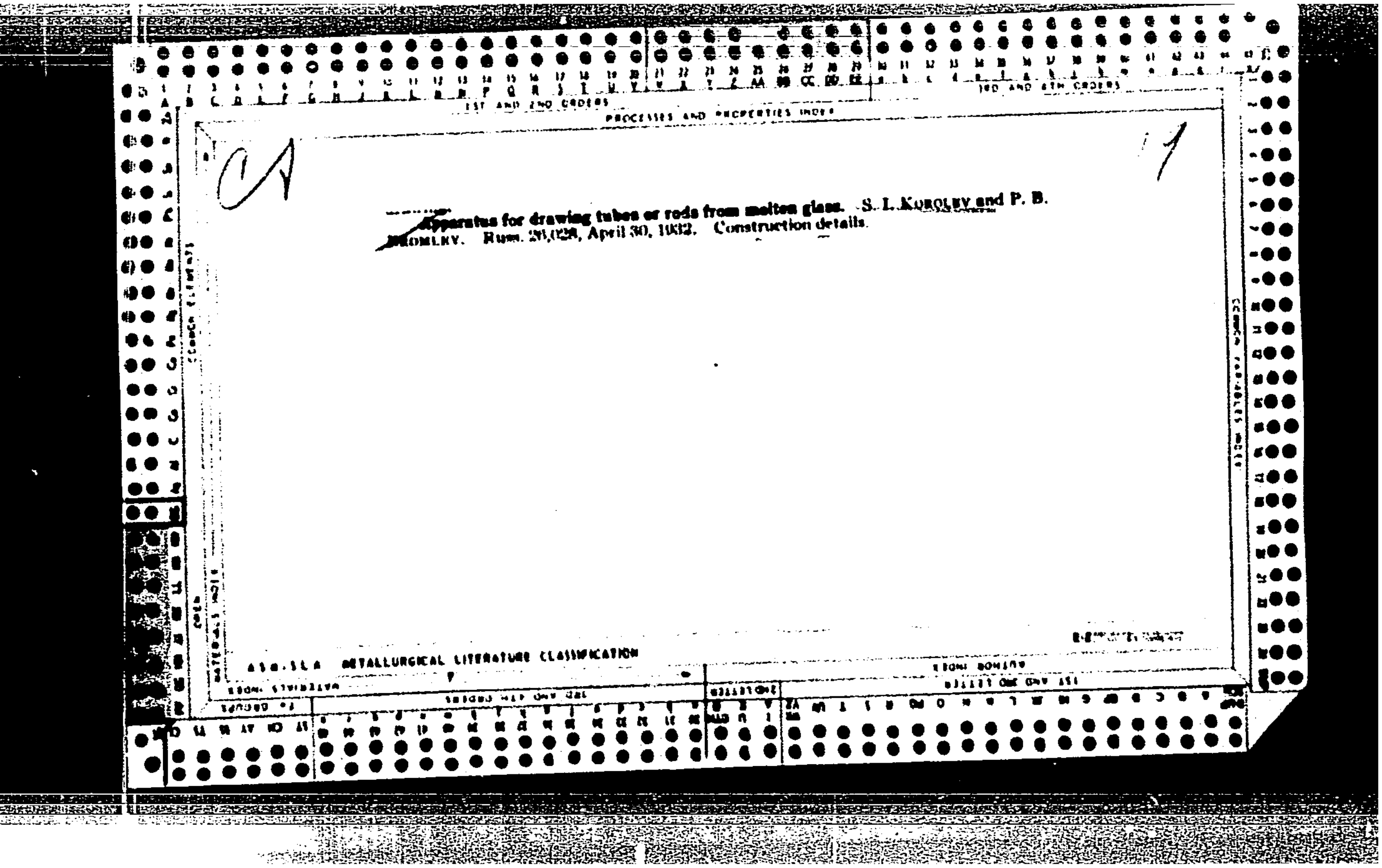

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Apparatus for drawing tubes or rods from molten glass. S. L. Korolev and P. B. Bromlev. Russ. 26,026, April 30, 1932. Construction details.

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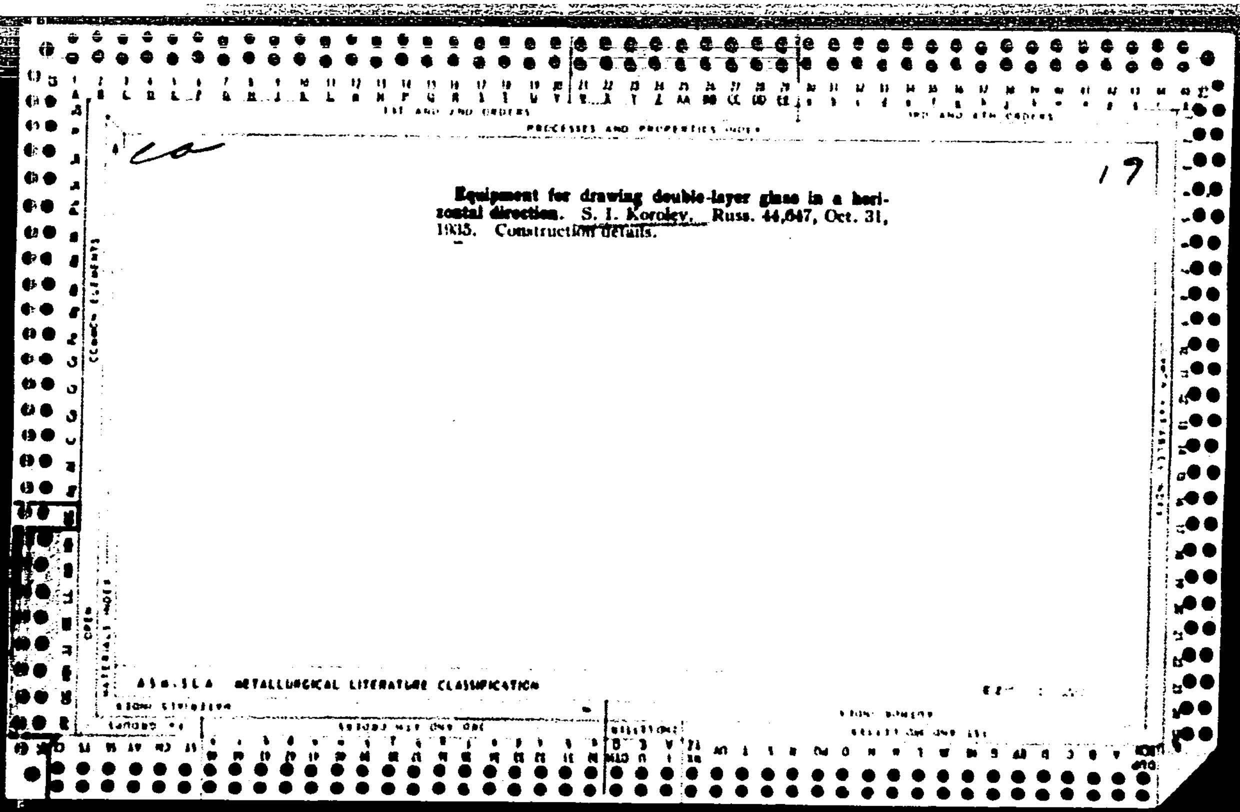

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Equipment for drawing double-layer glass in a horizontal direction. S. I. Korolev. Russ. 44,647, Oct. 31, 1935. Construction details.

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Glass-melting furnace with water cooling. S. I. Korolev. Russ. 54,761, April 30, 1939. Constructional details.

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A.C.S.

[illegible]

Drawing glass by the Fourcault method. S. I. Kuholev. Russ. 56,814, April 30, 1940. 32a. 23.01.—Structural details of a device for drawing sheets, tubes, etc. M. Ho.

A.C.S.

Glass

Arrangement for heating a ribbon of glass drawn from the melt. S. I. Kobolev. Russ. 56,936, April 30, 1940. 32a. 23.01.—The glass ribbon is heated throughout its width by a gas flame. The gas is fed into tubes arranged parallel to the width of the ribbon and provided with perforations through which the gas escapes to be burned.
M.Ho.

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Thermal inhomogeneity of glass and methods for removal. S. I. Karatev and T. D. Ivanova. *Prom. Stroitel. Materialy* 1941, No. 3, 55-7; *Chem. Zentr.* 1944, II, 2070. The formation of streaks and other glass defects in window glass, as the result of thermal variations in various methods of manuf., is discussed, as well as methods for obtaining uniform temp. conditions. In the U. S. S. R. the following methods are mostly used in the production of window glass: (1) continuous horizontal roller method, (2) Fourcault method and (3) Gregorius-Pittsburg method.

John L. Sheldon

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